ABSTRACT OF THE DISCLOSURE

The present invention, generally speaking, provides a simple, all-digital method and apparatus for determining the phase of a first clock signal relative to a second clock signal. The first clock signal may be a digital approximation of a periodic analog signal such as an RF signal. A sampling technique is employed that produces a stream of digital bits containing relative phase information. From the stream of digital bits is formed a digital word indicative of the relative phase. The digital word may be formed using a digital filter. Advantageously, an extensive body of digital filtering techniques applicable to Sigma-Delta (sometimes referred to as Delta-Sigma) A/D converters may be applied directly to the digital stream. By using an appropriately-chosen weighting function, high accuracy may be obtained.